



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2015-2048; Directorate Identifier 2015-CE-015-AD; Amendment 39-18230; AD 2015-16-05]**

**RIN 2120-AA64**

**Airworthiness Directives; British Aerospace Regional Aircraft Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for British Aerospace Regional Aircraft Jetstream Series 3101 and Jetsream Model 3201 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as missing countersunk washers under the head of the main landing gear trunnion cap tension bolts that could cause fatigue in the bolt shanks. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-2048; or in person at Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.

For service information identified in this AD, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone: +44 1292 675207; fax: +44 1292 675704; email: [RAPublications@baesystems.com](mailto:RAPublications@baesystems.com); Internet: <http://www.baesystems.com/Businesses/RegionalAircraft/>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the Internet at <http://www.regulations.gov> by searching for Docket No. FAA-2015-2048.

**FOR FURTHER INFORMATION CONTACT:** Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: [doug.rudolph@faa.gov](mailto:doug.rudolph@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to adding an AD that would apply to British Aerospace Regional Aircraft Model Jetstream Series 3101 and Jetstream Model 3201 airplanes. The NPRM was published in the *Federal Register* on June 9, 2015 (80 FR 32510). The NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country.

The MCAI states:

The review of the BAE production drawing for main landing gear (MLG) fitting installation identified a risk of omitting installation of a countersunk washer under the head of the MLG trunnion cap tension bolts, potentially causing fatigue in the bolt shank under the head of such tension bolt(s).

This condition, if not detected and corrected, could lead to failure of the bolt(s), thereby compromising the structural integrity of the other MLG tension bolts holding the MLG in place, possibly resulting in collapse of the MLG on take-off or landing with consequent damage to the aeroplane and injury to occupants.

Although so far, no in-service bolt head failures have been reported since entry in to service of the type design in 1986, to address this potential unsafe condition, BAE Systems (Operations) Ltd issued Service Bulletin (SB) 57- JA120141 to provide inspection instructions.

For the reasons described above, this AD requires inspection and, depending on findings, replacement of the MLG trunnion cap tension bolts.

The MCAI can be found in the AD docket on the Internet at:

<http://www.regulations.gov/#!documentDetail;D=FAA-2015-2048-0003>.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 32510, June 9, 2015) or on the determination of the cost to the public.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 32510, June 9, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 32510, June 9, 2015).

## **Related Service Information under 1 CFR part 51**

We reviewed British Aerospace Regional Aircraft British Aerospace Jetstream Series 3100 & 3200 Service Bulletin 57-JA120141, REVISION 1, dated April 8, 2014. The service information describes procedures for inspection and replacement of main landing gear trunnion cap tension bolts. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

## **Costs of Compliance**

We estimate that this AD will affect 66 products of U.S. registry. We also estimate that it will take about 6 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the AD on U.S. operators to be \$33,660, or \$510 per product.

In addition, we estimate that any necessary follow-on actions will take about 1 work-hour and require parts costing \$1,200, for a cost of \$1,285 per product. We have no way of determining the number of products that may need these actions.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-2048; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

2015-16-05 **British Aerospace Regional Aircraft:** Amendment 39-18230; Docket No. FAA-2015-2048; Directorate Identifier 2015-CE-015-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to British Aerospace Regional Aircraft Jetstream Series 3101 and Jetstream Model 3201 airplanes, all serial numbers, certificated in any category.

#### **(d) Subject**

Air Transport Association of America (ATA) Code 32: Landing Gear.

#### **(e) Reason**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as missing countersunk washers under the head of the main landing gear (MLG) trunnion cap tension bolts that could cause fatigue in the bolt shanks. We are issuing this AD to detect and correct missing countersunk washers, which could lead to failure of the bolt(s), thereby compromising the structural integrity of the other MLG tension bolts holding the MLG in place, possibly resulting in collapse of the MLG on take-off or landing with consequent damage to the airplane and injury to occupants.

**(f) Actions and Compliance**

Unless already done, do the actions in paragraphs (f)(1) through (f)(4) of this AD, including all subparagraphs, following the Accomplishment Instructions in British Aerospace Jetstream Series 3100 & 3200 Service Bulletin 57-JA120141, REVISION 1, dated April 8, 2014:

(1) This AD allows credit for the actions required in paragraphs (f)(3) and (f)(4), including all subparagraphs, of this AD if done before [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) following the Accomplishment Instructions of British Aerospace Jetstream Series 3100 & 3200 Service Bulletin 57-JA120141, Original Issue, dated: July 31, 2012.

(2) For the purposes of this AD, owner/operators who do not track total flight cycles (FC) must multiply the total number of airplane hours time-in-service by 0.75 to calculate the FC.

(3) For Pre-Mod JM5218 airplanes: Within 250 FC after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do a magnetic particle inspection (MPI) of each MLG trunnion cap tension bolt.

(i) If no crack is found during the MPI required by paragraph (f)(1) of this AD, before further flight, either re-install the crack-free bolt(s) or install a replacement bolt(s) having the same part number (P/N) as the original bolt. Install a countersunk washer under the bolt(s) ensuring the washer P/N is applicable to the diameter bolt installed as specified in figure 1 of paragraph (f)(3)(i) of this AD.

<b>Bolt P/N</b>	<b>Washer P/N</b>
MS21250H06040	PKS1000-6-2-S (washer)
MS21250H07040	PKS1000-7-2-S (washer)

Figure 1 of paragraph (f)(3)(i) – Pre-Mod JM5218 Replacement Parts

(ii) If a cracked bolt is found during the inspection required by paragraph (f)(3) of this AD, before further flight, replace each cracked bolt with a replacement bolt having the same P/N as the original bolt. Install a countersunk washer under the bolt ensuring the washer P/N is applicable to the diameter bolt installed as specified in figure 1 of paragraph (f)(3)(i) of this AD.

(4) For Post-Mod JM5218 airplanes: Within 250 FC after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), visually inspect each MLG trunnion cap tension bolt to determine which type of bolt is installed.

(i) If it is determined the installed bolts are P/N MS21134H07045 or P/N MS21134H07059 during the inspection required in paragraph (f)(4) of this AD, before further flight (except as specified in paragraph (f)(4)(i)(A) of this AD), replace each ‘old’ bolt P/N with a ‘new’ bolt P/N as specified in figure 2 of paragraph (f)(4)(i) of this AD and install a washer having P/N PKS1000-7-2-S under each bolt.

<b>Bolt P/N ‘Old’</b>	<b>Bolt P/N ‘New’</b>
MS21134H07045	MS21134H07046, or MS21250H07046
MS21134H07059	MS21134H07060, or MS21250H07060

Figure 2 of paragraph (f)(4)(i) – Post-Mod JM5218 Replacement Parts

(A) If no ‘new’ replacement bolt is available to comply with paragraph (f)(4)(i) of this AD, the ‘old’ bolt may be reinstalled without a countersunk washer, provided that within 500 FC after reinstallation and repetitively thereafter at intervals not to exceed 500 FC, each affected bolt is inspected by MPI.



(B) Within 2,000 FC after reinstallation of a bolt as allowed by paragraph (f)(4)(i)(A) of this AD or before further flight if a crack was found during any MPI as required by paragraph (f)(4)(i)(A) of this AD, whichever occurs first, replace the 'old' bolt P/N with a 'new' bolt P/N as specified in figure 2 of paragraph (f)(4)(i) of this AD and install a washer having P/N PKS1000-7-2-S under each bolt.

(ii) If it is determined the installed bolts are P/N MS21250H07046 or P/N MS21250H07060 and no countersunk washer is installed during the inspection required in paragraph (f)(4) of this AD, before further flight, do an MPI of each MLG trunnion cap tension bolt.

(A) If no crack is found during the MPI required by paragraph (f)(4)(ii) of this AD, before further flight, either re-install the crack-free bolts or install replacement bolts having a 'new' bolt P/N as specified in figure 2 of paragraph (f)(4)(i) of this AD and install a countersunk washer P/N PKS1000-7-2-S under each bolt.

(B) If any crack is found during the MPI required by paragraph (f)(4)(ii) of this AD, before further flight, replace each cracked bolt with a serviceable one having a 'new' bolt P/N as specified in figure 2 of paragraph (f)(4)(i) of this AD and install a countersunk washer P/N PKS1000-7-2-S under each bolt.

**(g) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: [doug.rudolph@faa.gov](mailto:doug.rudolph@faa.gov). Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(h) Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2015-0061, dated April 20, 2015; and British Aerospace Jetstream Series 3100 & 3200 Service Bulletin 57-JA120141, Original Issue, dated: July 31, 2012, for related information. The MCAI can be found in the AD docket on the Internet at:  
<http://www.regulations.gov/#!documentDetail;D=FAA-2015-2048-0003>.

**(i) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) British Aerospace Jetstream Series 3100 & 3200 Service Bulletin 57-JA120141, REVISION 1, dated April 8, 2014.

(ii) Reserved.

(3) For British Aerospace Regional Aircraft service information identified in this AD, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone: +44 1292 675207; fax: +44 1292 675704; email: [RApublications@baesystems.com](mailto:RApublications@baesystems.com); Internet: <http://www.baesystems.com/Businesses/RegionalAircraft/>.

(4) You may view this service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. In addition, you can access this service information on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-2048.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri, on August 6, 2015.

Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2015-19776 Filed: 8/14/2015 08:45 am; Publication Date: 8/17/2015]